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7/23/02

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Case No. 98,475-B1)

In re Application of )  
Paul Mertens et al. )  
 ) Group Art Unit: 1746  
Serial No.: Not yet assigned )  
 ) Examiner: Not Assigned  
Filed: February 13, 2002 )  
 )  
For: METHOD AND APPARATUS FOR LOCALIZED )  
LIQUID TREATMENT OF THE SURFACE OF A )  
SUBSTRATE )

PRELIMINARY AMENDMENT

Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

IN THE SPECIFICATION

Please amend page 21, line 31 to page 22, line 34 of the specification as follows.  
A marked up version of the amended portion of the specification, to show all the changes,  
is attached hereto on pages separate from the amendment in accordance with 37 CFR  
1.121(c)(1)(ii):

Figure 6a describes the method and apparatus according to another embodiment of the invention, which is suitable for the technique of impurity collection. It may also be suitable for obtaining larger sized film-free areas, like zero-markers. An amount of liquid 60 is put into contact with the surface of the substrate 1 through a central channel 61. This channel is closed off on the top side. Advantageously, the pressure inside the channel 63 is lower than the ambient pressure acting on the substrate surface. The lower the pressure above the liquid, the higher the amount of liquid which can be contained. A channel 62 which is placed around the channel 61 is used to supply a gaseous tensio-active substance, which reduces the surface tension of the liquid so that said liquid is contained on a localized area of the surface. In case a droplet of said liquid is used, a reduction of the pressure above said droplet is unnecessary. In this case, the central channel 61 may be open on top.

A sealing device such as an O-ring 63 may be added between the substrate and the outer wall of the channel 61. In this case, the stream of gaseous tensio-active substance would make sure that any liquid leaking through the seal is contained on the area to be treated.